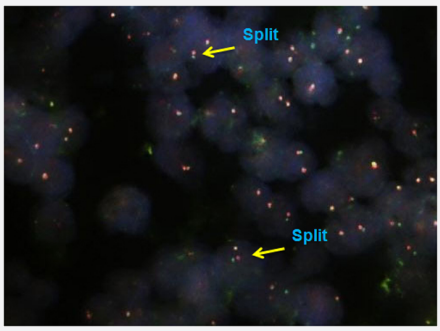
RARA Split FISH Probe

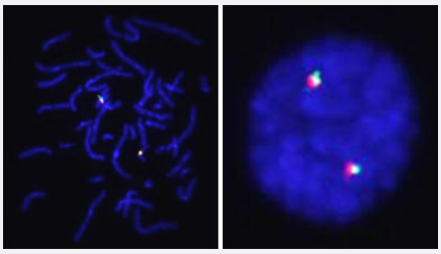
Catalog # FS0005 Size 200 uL, 100 uL

Applications



Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

Human lymph node (FFPE) stained with RARA Split FISH Probe. Human lymph node showed RARA gene split.



Hybridization position of the probes on the chromosome.

Hybridization position of the probes on the chromosome.

Specification

Product Description	Labeled FISH probes for identification of gene split using Fluorescent In Situ Hybridization Technique. (Technology).

Probe 1	**Name:** RARA(Texas Red) **Size:** Approximately 490kb **Fluorophore:** Texas Red **Location:** 17q21.2
Probe 2	**Name:** RARA(FITC) **Size:** Approximately 690kb **Fluorophore:** FITC **Location:** 17q21.2
Probe Gap	The gap between two probes is approximately 15 kb.
Origin	Human
Source	Genomic DNA
Reactivity	Human
Form	Liquid
Notice	We **strongly recommend** the customer to use FFPE FISH PreTreatment Kit 1 (Catalog #: KA2375 or KA2691) for the pretreatment of Formalin-Fixed Paraffin-Embedded (FFPE) tissue sections.
Regulation Status	For research use only (RUO)
Quality Control Testing	Representative images of normal human cell (lymphocyte) stain with the dual color FISH probe. The l eft image is chromosomes at metaphase, and the right image is an interphase nucleus.
Supplied Product	DAPI Counterstain (1500 ng/mL) 125 uL for each 100 uL FISH Probe
Storage Instruction	Store at 4°C in the dark.
Note	Hybridization position of the probes on the chromosome. Hybridization position of the probes on the chromosome.

Applications

- Fluorescent In Situ Hybridization (Cell)

  Protocol Download

- Fluorescent *In Situ* Hybridization (Formalin/PFA-fixed paraffin-embedded sections)

  Human lymph node (FFPE) stained with RARA Split FISH Probe. Human lymph node showed RARA gene split.

  Protocol Download

Gene Info — RARA

Entrez GeneID	5914
Gene Name	RARA
Gene Alias	NR1B1, RAR
Gene Description	retinoic acid receptor, alpha
Omim ID	180240
Gene Ontology	Hyperlink
Gene Summary	Retinoid signaling is transduced by 2 families of nuclear receptors, retinoic acid receptor (RAR) and retinoid X receptor (RXR; see MIM 180245), which form RXR/RAR heterodimers. In the absence of ligand, DNA-bound RXR/RARA represses transcription by recruiting the corepressors NCOR1 (MIM 600849), SMRT (NCOR2; MIM 600848), and histone deacetylase (see MIM 601241). When ligand binds to the complex, it induces a conformational change allowing the recruitment of coactivators, histone acetyltransferases (see MIM 603053), and the basic transcription machinery. Translocations that always involve rearrangement of the RARA gene are a cardinal feature of acute promyelocytic leukemia (APL; MIM 612376). The most frequent translocation is t(15,17)(q21;q22), which fuses the RARA gene with the PML gene (MIM 102578) (Vitoux et al., 2007 [PubMed 17468032]).[supplied by OMIM
Other Designations	OTTHUMP00000164454|OTTHUMP00000164456|Retinoic acid receptor, alpha polypeptide|nucleophosmin-retinoic acid receptor alpha fusion protein NPM-RAR long form

Pathway

- Acute myeloid leukemia
- Pathways in cancer

Disease

- Alcoholism
- Alzheimer disease
- Attention Deficit Disorder with Hyperactivity
- Autistic Disorder
- Bipolar Disorder

- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Diabetes Complications
- Diabetes Mellitus
- Disease Models
- Drug Toxicity
- Edema
- Genetic Predisposition to Disease
- Hypercholesterolemia
- Liver Cirrhosis
- Mental Disorders
- Metabolic Syndrome X
- Myopia
- Neoplasms
- Osteoporosis
- Schizophrenia